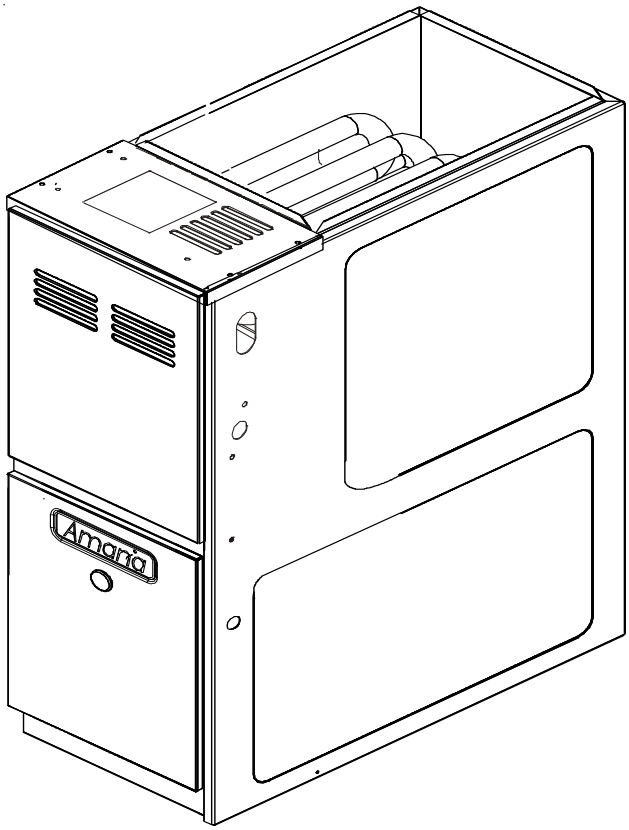
Heating & Air Conditioning
Amana
LASTS AND LASTS AND LASTS.™

TECHNICAL MANUAL

AMH8 33-3/8" 80% Gas Furnace
80% AFUE, Twin Comfort™,
Multi-Speed, Upflow/Horizontal

- Refer to Service Manual RS6612007 for troubleshooting information.
- All safety information must be followed as provided in the Service Manual.
- Refer to the appropriate Parts Catalog for part number information.
- Model numbers listed on page 3.



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This manual is to be used by qualified, professionally trained HVAC technicians only. Goodman does not assume any responsibility for property damage or personal injury due to improper service procedures or services performed by an unqualified person.

RT6621023r3
November 2013

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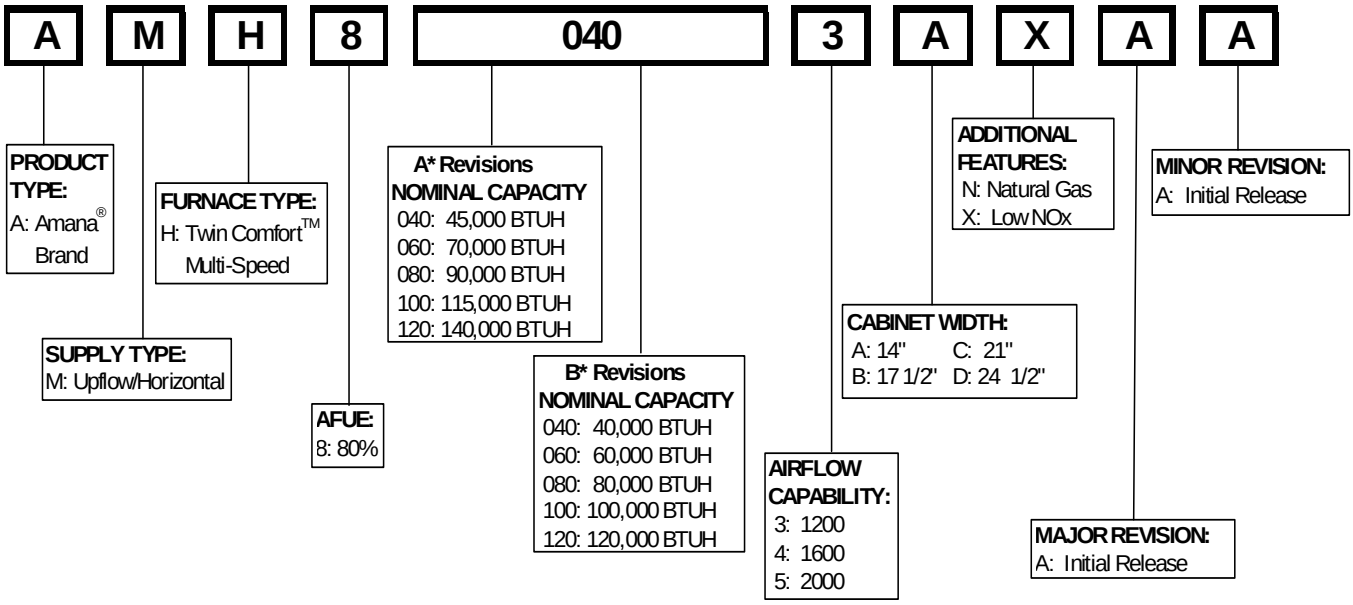
PRODUCT IDENTIFICATION

The model and manufacturing number are used for positive identification of component parts used in manufacturing. Please use these numbers when requesting service or parts information.



⚠ WARNING

HIGH VOLTAGE!

Disconnect ALL power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury or death.

⚠ WARNING **Goodman will not be responsible for any injury or property damage arising from improper service or service procedures. If you install or perform service on this unit, you assume responsibility for any personal injury or property damage which may result. Many jurisdictions require a license to install or service heating and air conditioning equipment.**

⚠ WARNING **Installation and repair of this unit should be performed ONLY by individuals meeting the requirements of an "entry level technician", at a minimum, as specified by the Air-Conditioning, Heating, and Refrigeration Institute (AHRI). Attempting to install or repair this unit without such background may result in product damage, personal injury or death.**

PRODUCT IDENTIFICATION

The model and manufacturing number are used for positive identification of component parts used in manufacturing. Please use these numbers when requesting service or parts information.

AMH80403A*A*	AMH80403A*B*
AMH80603A*A*	AMH80603A*B*
AMH80604B*A*	AMH80604B*B*
AMH80803B*A*	AMH80803B*B*
AMH80804B*A*	AMH80804B*B*
AMH80805C*A*	AMH80805C*B*
AMH81005C*A*	AMH81005C*B*
AMH81205D*A*	AMH81205D*B*

**Models are available in Natural Gas and low NOx.*

⚠ WARNING **The United States Environmental Protection Agency ("EPA") has issued various regulations regarding the introduction and disposal of refrigerants introduced into this unit. Failure to follow these regulations may harm the environment and can lead to the imposition of substantial fines. These regulations may vary by jurisdiction. Should questions arise, contact your local EPA office.**

⚠ WARNING **Do not connect or use any device that is not design certified by Goodman for use with this unit. Serious property damage, personal injury, reduced unit performance and/or hazardous conditions may result from the use of such non-approved devices.**

⚠ WARNING **To prevent the risk of property damage, personal injury, or death, do not store combustible materials or use gasoline or other flammable liquids or vapors in the vicinity of this appliance.**

PRODUCT DESIGN

General Operation

The AMH8 furnaces are equipped with an electronic ignition device used to light the burners and an induced draft blower to exhaust combustion products.

An interlock switch prevents furnace operation if the blower door is not in place. Keep the blower access door in place except for inspection and maintenance.

This furnace is also equipped with a self-diagnosing electronic control module. In the event a furnace component is not operating properly, the control module LED will flash on and off in a factory-programmed sequence, depending on the problem encountered. This light can be viewed through the observation window in the blower access door. Refer to the *Troubleshooting Chart* for further explanation of the LED codes and *Abnormal Operation - Integrated Ignition Control* section in the Service Instructions for an explanation of the possible problem.

The rated heating capacity of the furnace should be greater than or equal to the total heat loss of the area to be heated. The total heat loss should be calculated by an approved method or in accordance with “ASHRAE Guide” or “Manual J-Load Calculations” published by the Air Conditioning Contractors of America.

*Obtain from: American National Standards Institute 1430 Broadway New York, NY 10018

Location Considerations

- The furnace should be as centralized as is practical with respect to the air distribution system.
- Do not install the furnace directly on carpeting, tile, or combustible material other than wood flooring.
- When suspending the furnace from rafters or joists, use 3/8" threaded rod and 2” x 2” x 3/8” angle as shown in the Installation and Service Instructions. The length of the rod will depend on the application and clearance necessary.
- When installed in a residential garage, the furnace must be positioned so the burners and ignition source are located not less than 18 inches (457 mm) above the floor and protected from physical damage by vehicles.

⚠ WARNING

TO PREVENT POSSIBLE PERSONAL INJURY OR DEATH DUE TO ASPHYXIATION, THIS FURNACE MUST BE CATEGORY I VENTED. DO NOT VENT USING CATEGORY III VENTING.

1. Category I Venting is venting at a non-positive pressure. A furnace vented as Category I is considered a fan-assisted appliance and the vent system does not have to be “gas tight.” **NOTE:** Single stage gas furnaces with induced draft blowers draw products of combustion through a heat exchanger allowing, in some instances, common venting with natural draft appliances (i.e. water heaters). All installations must be vented in accordance with National Fuel Gas Code NFPA 54/ANSI Z223.1 - latest edition. In Canada, the furnaces must be vented in accordance with the National Standard of Canada, CAN/CSA B149.1 and CAN/CSA B149.2 - latest editions and amendments.

NOTE: The vertical height of the Category I venting system must be at least as great as the horizontal length of the venting system.

2. Line voltage wiring can enter through the right or left side of the furnace. Low voltage wiring can enter through the right or left side of furnace.
3. Conversion kits for propane gas and high altitude natural and propane gas operation are available. See High Altitude Derate chart for details.

PRODUCT DESIGN

Accessibility Clearances (Minimum)

Unobstructed front clearance of 24" **for servicing** is recommended.

MINIMUM CLEARANCE TO COMBUSTIBLE MATERIALS - INCHES

Sides	Rear	Front*	Vent		Top
			SW	B	
1	0	3	6	1	1

* 24" clearance for serviceability recommended.
** Single Wall Vent (SW) to be used only as a conncetor.
Refer to the venting tables outlined in the Installation Manual for additional venting requirements.

Note: In all cases accessibility clearance shall take precedence over clearances from the enclosure where accessibility clearances are greater. All dimensions are given in inches.

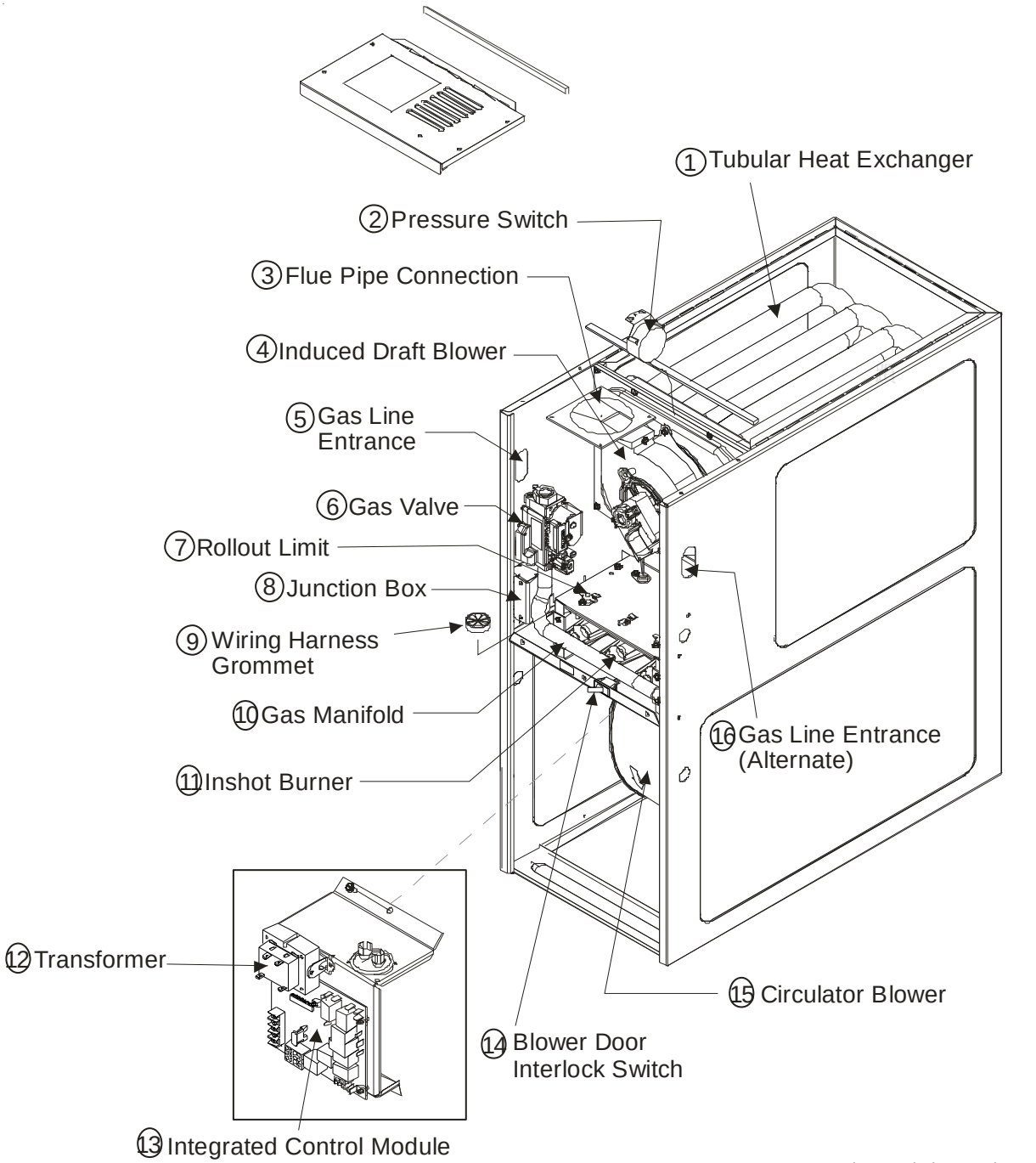
High Altitude Derate

IMPORTANT NOTE: The furnace as shipped requires no change to run between 0 - 4500 feet. Do not attempt to increase the firing rate by changing orifices or increasing the manifold pressure below 4500 feet. This can cause poor combustion and equipment failure.

High altitude installations above 4500 feet may require both a pressure switch and an orifice change. These changes are necessary to compensate for the natural reduction in the density of both the gas fuel and the combustion air at higher altitude.

For installations above 4500 feet, please refer to your distributor for required kit(s). Contact the distributor for a tabular listing of appropriate manufacturer's kits for propane gas and/or high altitude installations. The indicated kits must be used to insure safe and proper furnace operation. All conversions must be performed by a qualified installer, or service agency.

COMPONENT IDENTIFICATION



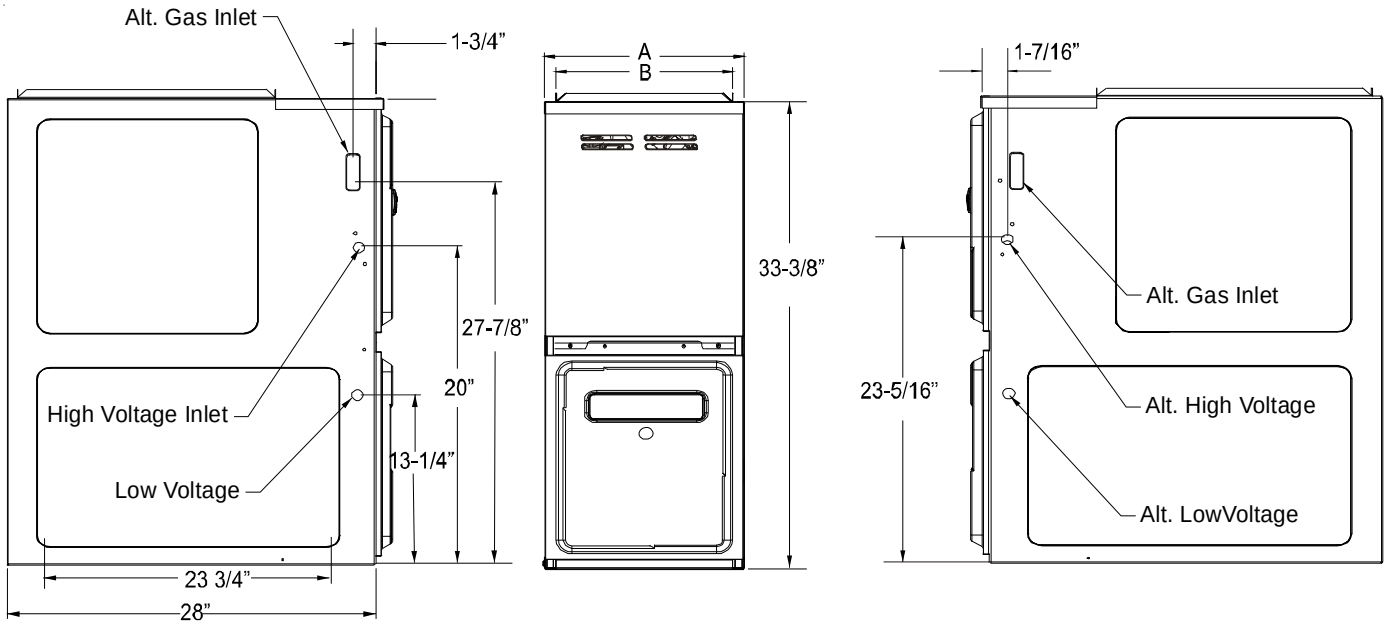
Note: Primary Limit Not Shown

Upflow/Horizontal

1 Tubular Heat Exchanger	9 Wiring Harness Grommet
2 Pressure Switch	10 Gas Manifold
3 Flue Pipe Connection	11 Inshot Burner
4 Induced Draft Blower	12 Transformer
5 Gas Line Entrance	13 Integrated Control Module
6 Gas Valve	14 Blower Door Interlock Swtich
7 Rollout Limit	15 Circulator Blower
8 Junction Box	16 Gas Line Entrance (Alternate)

PRODUCT DIMENSIONS

AMH8



MODELS	A	B
AMH80403A*** AMH80603A***	14	12-1/2
AMH80604B*** AMH80803B*** AMH80804B***	17-1/2	16
AMH80805C*** AMH81005C***	21	19-1/2
AMH81205D***	24-1/2	23

All dimensions are in inches.

PRESSURE SWITCH TRIP POINTS AND USAGE CHART		
MODEL	TRIP POINT ID BLOWER PRESSURE SWITCH	ID BLOWER PRESSURE SWITCH PART #
AMH80403A*A*	-0.70	B1370158
AMH80603A*A*	-0.70	B1370158
AMH80604B*A*	-0.75	B1370179
AMH80803B*A*	-0.75	B1370179
AMH80804B*A*	-0.75	B1370179
AMH80805C*A*	-0.75	B1370179
AMH81005C*A*	-0.90	1030F00041
AMH81205D*A*	-0.80	0130F00042

For installaions in Canada, the AMH8 furnace is certified only to 4,500 ft.

* Negative pressure readings are in inches of water column (*w.c.)

PRIMARY LIMIT				
Part Number	0130F00035	20162906	20162903	0130F00036
Open Setting (°F)	220	170	160	180
AMH80403A*A*	1	---	---	---
AMH80603A*A*	---	1	---	---
AMH80604B*A*	---	1	---	---
AMH80803B*A*	---	1	---	---
AMH80804B*A*	---	---	1	---
AMH80805C*A*	---	1	---	---
AMH81005C*A*	---	---	---	1
AMH81205D*A*	---	---	1	---

ROLLOUT LIMIT SWITCHES	
Part Number	10123529
Open Setting (°F)	300
AMH80403A***	2
AMH80603A***	2
AMH80604B***	2
AMH80803B***	2
AMH80804B***	2
AMH80805C***	2
AMH81005C***	2
AMH81205D***	2

AUXILIARY LIMIT SWITCHES	
Part Number	0130F00038
Open Setting (°F)	120
AMH80403A***	1
AMH80603A***	1
AMH80604B***	1
AMH80803B***	1
AMH80804B***	1
AMH80805C***	1
AMH81005C***	1
AMH81205D***	1

PRESSURE SWITCH TRIP POINTS AND USAGE CHART		
MODEL	TRIP POINT ID BLOWER PRESSURE SWITCH	ID BLOWER PRESSURE SWITCH PART #
AMH80403A*B*	-0.80	0130F00042
AMH80603A*B*	-0.80	0130F00042
AMH80604B*B*	-0.90	0130F00041
AMH80803B*B*	-0.80	0130F00042
AMH80804B*B*	-0.80	0130F00042
AMH80805C*B*	-0.80	0130F00042
AMH81005C*B*	-0.80	0130F00042
AMH81205D*B*	-0.80	0130F00042

For installaions in Canada, the AMH8 furnace is certified only to 4,500 ft.

* Negative pressure readings are in inches of water column (*w.c.)

PRIMARY LIMIT			
Part Number	20162904	20162903	20162901
Open Setting (°F)	150	160	210
AMH80403A*B*	---	---	1
AMH80603A*B*	1	---	---
AMH80604B*B*	1	---	---
AMH80803B*B*	1	---	---
AMH80804B*B*	1	---	---
AMH80805C*B*	---	1	---
AMH81005C*B*	1	---	---
AMH81205D*B*	---	1	---

ROLLOUT LIMIT SWITCHES	
Part Number	10123529
Open Setting (°F)	300
AMH80403A***	2
AMH80603A***	2
AMH80604B***	2
AMH80803B***	2
AMH80804B***	2
AMH80805C***	2
AMH81005C***	2
AMH81205D***	2

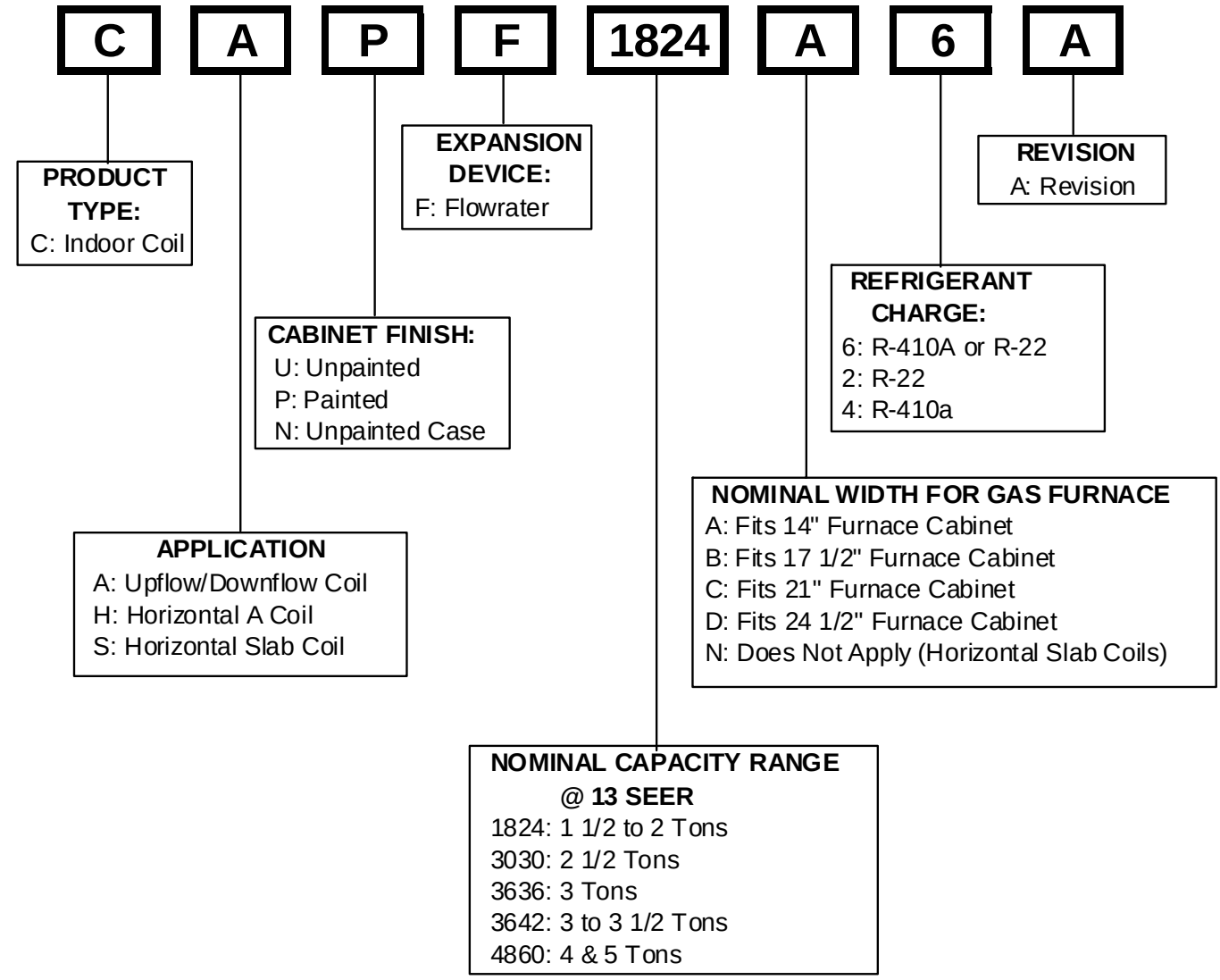
AUXILIARY LIMIT SWITCHES	
Part Number	0130F00038
Open Setting (°F)	120
AMH80403A***	1
AMH80603A***	1
AMH80604B***	1
AMH80803B***	1
AMH80804B***	1
AMH80805C***	1
AMH81005C***	1
AMH81205D***	1

PRODUCT DESIGN

Coil Matches:

A large array of Amana® brand coils are available for use with the AMH8 furnaces, in either upflow or horizontal applications. These coils are available in both cased and uncased models (with the option of a field installed TXV expansion device). These 80% furnaces match up with the existing Amana® brand coils as shown in the chart below.

Coil Matches (Amana® brand units using R22 and R-410A):



- All CAPF coils in B, C, & D widths have insulated blank off plates for use with one size smaller furnaces.
- All CAPF coils have a CAUF equivalent.
- All CHPF coils in B, C & D heights have an insulated Z bracket for use with one size smaller furnace.
- All proper coil combinations are subject to being ARI rated with a matched outdoor unit.

PRODUCT DESIGN

Thermostats:

It is recommended that a single-stage heat, non-power robbing thermostat be used. Refer to the product marketing literature for a complete list of thermostats offered.

Filters:

Filters are required with this furnace and must be provided by the installer. The filters used must comply with UL900 or CAN/ULCS111 standards. Installing this furnace without filters will void the unit warranty.

Upflow Filters

Side Return(s)		
Cabinet Width (in.)	Nominal Filter Size (in.)	Approx. Flow Area (in^2)
All	16 x 25 x 1	400

Bottom Return		
Cabinet Width (in.)	Nominal Filter Size (in.)	Approx. Flow Area (in^2)
14	12 x 25 x 1	300
17-1/2	14 x 25 x 1	350
21	16 x 25 x 1	400
24-1/2	20 x 25 x 1	500

Refer to Minimum Filter Area tables to determine filter area requirement. **NOTE:** Filters can also be installed elsewhere in the duct system such as a central return.

MINIMUM FILTER SIZES for DISPOSABLE FILTERS

FURNACE INPUT	FILTER SIZE
40M	320 in^2
60M	483 in^2
80M	640 in^2
100M	800 in^2
120M	738 in^2

DISPOSABLE NOMINAL 300 F.M. FACE VELOCITY

PRODUCT DESIGN

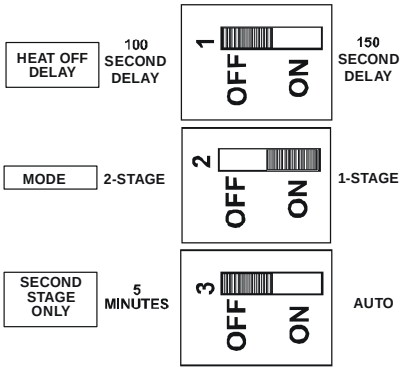
TwinComfort™ Configuration & Operation

TwinComfort™

This furnace is capable of the following heating modes:

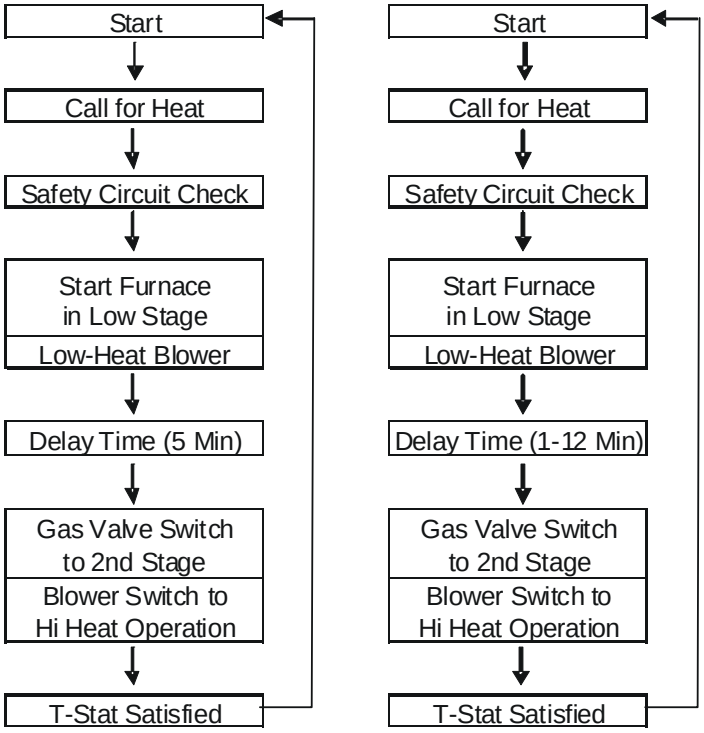
- Single Stage (Factory Setting)
- Modified Two-Stage
  - Fixed 5-Min. Low Stage
  - Auto Time (1-12 Min.) Low Stage

To change from the factor single-stage operation, adjust the dipswitches on the ignition control as follows:



* Switches for White-Rodgers board shown above
With other venders, order of switches may vary
but functionality stays the same.

Note: This furnace is designed to be used with a single-stage thermostat.



FURNACE SPECIFICATIONS AMH8***A*

MODEL	AMH80403A*A*	AMH80603A*A*	AMH80604B*A*	AMH80803B*A*	AMH80804B*A*	AMH80805C*A*	AMH81005C*A*	AMH81205D*A*
Input, Natural Gas (BTUH)	45,000	70,000	70,000	90,000	90,000	90,000	115,000	140,000
Output, Natural Gas (BTUH) [1]	36,000	56,000	56,000	72,000	72,000	72,000	92,000	112,000
Output, LP (BTUH)	32,000	48,000	48,000	64,000	64,000	64,000	80,000	96,000
A.F.U.E.	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%
Rated External Static (" w.c.)	0.20 - 0.50	0.20 - 0.50	0.20 - 0.50	0.20 - 0.50	0.20 - 0.50	0.20 - 0.50	0.20 - 0.50	0.20 - 0.50
Temperature Rise (°F)	25 - 55	25 -55	20 - 50	35 - 65	35 - 65	35 - 65	35 - 65	40 - 70
Pressure Switch Trip Point (" w.c.)	-0.70	-0.70	-0.75	-0.75	-0.75	-0.75	-0.90	-0.80
Blower Wheel (D" x W")	10x6	10x6	10x8	10x8	10x8	10x10	10x10	11x10
Blower Horsepower	1/3	1/3	1/2	1/3	1/2	1/2	1/2	3/4
Blower Speeds	4	4	4	4	4	4	4	4
Max CFM @ 0.5 E.S.P.	1298	1157	1883	1448	1725	1960	1974	2131
Power Supply (Volts/Hz/Ph)	115/60/1	115/60/1	115/60/1	115/60/1	115/60/1	115/60/1	115/60/1	115/60/1
Minimum Circuit Ampacity (MCA) [2]	8.1	8.1	12.5	8.1	12.5	12.5	12.5	14.7
Maximum Overcurrent Device [3]	15	15	15	15	15	15	15	15
Transformer (VA)	40	40	40	40	40	40	40	40
Primary Limit Setting (°F)	220	170	170	170	160	170	180	160
Auxiliary Limit Setting (°F)	120	120	120	120	120	120	120	120
Rollout Limit Setting (°F)	300	300	300	300	300	300	300	300
Fan Delay On Heating	30	30	30	30	30	30	30	30
Off Heating *	150	150	150	150	150	150	150	150
Fan Delay On Cooling	6	6	6	6	6	6	6	6
Off Cooling	45	45	45	45	45	45	45	45
Fan Delay On - Fan Only	0	0	0	0	0	0	0	0
Gas Supply Pressure (Natural/Propane) (" w.c.)	7 / 11	7 / 11	7 / 11	7 / 11	7 / 11	7 / 11	7 / 11	7 / 11
Manifold Pressure (Natural/Propane) (" w.c.)	3.5 / 10	3.5 / 10	3.5 / 10	3.5 / 10	3.5 / 10	3.5 / 10	3.5 / 10	3.5 / 10
Orifice Size (Natural/Propane)	43 / 55	43 / 55	43 / 55	43 / 55	43 / 55	43 / 55	43 / 55	43 / 55
Number of Burners	2	3	3	4	4	4	5	6
Vent Connector Diameter (inches)	4	4	4	4	4	4	4	4

*Off Heating - This fan delay timing is adjustable (90, 120, 150 or 180 seconds). 150 seconds as shipped.

1. These furnaces are manufactured for natural gas operation. Optional kits are available for conversion to propane operation.
2. Minimum Circuit Ampacity calculated as: (1.25 x Circulator Blower Amps) + I.D. Blower Amps. Wire sizes should be determined in accordance with National Electrical Codes.Extensive wire runs will require larger wire sizes.
3 Maximum Overcurrent protections Device refers to maximum recommended fuse or circuit breaker size. May use time delay fuses or HACR-type circuit breakers of the same sizes as noted.

NOTES:

1. For elevations above 2000 feet the rating should be reduced by 4% for each 1000 feet above sea level. The furnace must not be derated, orifice changes should only be made if necessary for altitude.
2. The total heat loss from the structure as expressed in TOTAL BTU/HR must be calculated by the manufacturers method or in accordance with the "A.S.H.R.A.E. GUIDE" or "MANUAL J-LOAD CALCULATIONS" published by the AIR CONDITIONING CONTRACTORS OF AMERICA. The total heat loss calculated should be equal to or less than the heating capacity. Output based on D.O.E. test procedures, steady state efficiency times output.

FURNACE SPECIFICATIONS

AMH8***B*

MODEL	AMH80403A*B*	AMH80603A*B*	AMH80604B*B*	AMH80803B*B*	AMH80804B*B*	AMH80805C*B*	AMH81005C*B*	AMH81205D*B*
Input, Natural Gas (BTUH)	40,000	60,000	60,000	80,000	80,000	80,000	100,000	120,000
Output, Natural Gas (BTUH) [1]	32,000	48,000	48,000	64,000	64,000	64,000	80,000	96,000
Output, LP (BTUH)	32,000	48,000	48,000	64,000	64,000	64,000	80,000	96,000
A.F.U.E.	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%
Rated External Static (" w.c.)	0.20 - 0.50	0.20 - 0.50	0.20 - 0.50	0.20 - 0.50	0.20 - 0.50	0.20 - 0.50	0.20 - 0.50	0.20 - 0.50
Temperature Rise (°F)	25 - 55	20 - 50	20 - 50	35 - 65	35 - 65	35 - 65	35 - 65	40 - 70
Pressure Switch Trip Point (" w.c.)	-0.80	-0.80	-0.90	-0.80	-0.80	-0.80	-0.80	-0.80
Blower Wheel (D" x W")	10x6	10x6	10x8	10x8	10x8	10x10	10x10	11x10
Blower Horsepower	1/3	1/3	1/2	1/3	1/2	1/2	1/2	3/4
Blower Speeds	4	4	4	4	4	4	4	4
Max CFM @ 0.5 E.S.P.	1298	1157	1883	1448	1725	1960	1974	2131
Power Supply (Volts/Hz/Ph)	115/60/1	115/60/1	115/60/1	115/60/1	115/60/1	115/60/1	115/60/1	115/60/1
Minimum Circuit Ampacity (MCA) [2]	8.1	8.1	12.5	8.1	12.5	12.5	12.5	14.7
Maximum Overcurrent Device [3]	15	15	15	15	15	15	15	15
Transformer (VA)	40	40	40	40	40	40	40	40
Primary Limit Setting (°F)	210	150	150	150	150	160	150	160
Auxiliary Limit Setting (°F)	120	120	120	120	120	120	120	120
Rollout Limit Setting (°F)	300	300	300	300	300	300	300	300
Fan Delay On Heating	30	30	30	30	30	30	30	30
Off Heating *	150	150	150	150	150	150	150	150
Fan Delay On Cooling	6	6	6	6	6	6	6	6
Off Cooling	45	45	45	45	45	45	45	45
Fan Delay On - Fan Only	0	0	0	0	0	0	0	0
Gas Supply Pressure (Natural/Propane) (" w.c.)	7 / 11	7 / 11	7 / 11	7 / 11	7 / 11	7 / 11	7 / 11	7 / 11
Manifold Pressure (Natural/Propane) (" w.c.)	3.5 / 10	3.5 / 10	3.5 / 10	3.5 / 10	3.5 / 10	3.5 / 10	3.5 / 10	3.5 / 10
Orifice Size (Natural/Propane)	45 / 55	45 / 55	45 / 55	45 / 55	45 / 55	45 / 55	45 / 55	45 / 55
Number of Burners	2	3	3	4	4	4	5	6
Vent Connector Diameter (inches)	4	4	4	4	4	4	4	4

*Off Heating - This fan delay timing is adjustable (90, 120, 150 or 180 seconds). 150 seconds as shipped.

1. These furnaces are manufactured for natural gas operation. Optional kits are available for conversion to propane operation.
2. Minimum Circuit Ampacity calculated as: (1.25 x Circulator Blower Amps) + I.D. Blower Amps. Wire sizes should be determined in accordance with National Electrical Codes.Extensive wire runs will require larger wire sizes.
3 Maximum Overcurrent protections Device refers to maximum recommended fuse or circuit breaker size. May use time delay fuses or HACR-type circuit breakers of the same sizes as noted.

NOTES:

1. The total heat loss from the structure as expressed in TOTAL BTU/HR must be calculated by the manufacturers method or in accordance with the "A.S.H.R.A.E. GUIDE" or "MANUAL J-LOAD CALCULATIONS" published by the AIR CONDITIONING CONTRACTORS OF AMERICA. The total heat loss calculated should be equal to or less than the heating capacity. Output based on D.O.E. test procedures, steady state efficiency times output.

BLOWER PERFORMANCE SPECIFICATIONS AMH8***A*

(CFM & Temperature Rise vs. External Static Pressure)															
Model	Motor Speed	Tons AC at 0.5" ESP	EXTERNAL STATIC PRESSURE (Inches Water Column)												
			0.1		0.2		0.3		0.4		0.5		0.6	0.7	0.8
			CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE	CFM	CFM	CFM
*MH80403A*A*	HIGH	3.0	1521	22	1466	23	1414	24	1373	24	1298	26	1243	1164	1075
	MED	2.5	1160	29	1160	29	1132	29	1121	30	1082	31	1042	997	925
	MED-LO	2.0	961	35	955	35	948	35	932	36	913	37	882	821	803
	LOW	1.5	781	43	785	42	781	43	773	43	761	44	745	716	668
*MH80603A*A*	HIGH	3.0	1422	36	1352	38	1307	40	1197	43	1157	45	1092	1075	983
	MED	2.5	1098	47	1081	48	1051	49	1039	50	1021	51	983	924	868
	MED-LO	2.0	919	56	913	57	892	58	847	----	829	----	818	792	728
	LOW	1.5	758	----	741	----	741	----	733	----	699	----	677	649	626
*MH80604B*A*	HIGH	4.0	2134	----	2100	25	2042	25	1975	26	1883	28	1786	1700	1601
	MED	3.5	1668	31	1663	31	1656	31	1645	32	1616	32	1549	1492	1391
	MED-LO	3.0	1419	37	1426	36	1426	36	1432	36	1419	37	1378	1328	1261
	LOW	2.5	1134	46	1145	45	1166	44	1171	44	1160	45	1144	1111	1071
*MH80803B*A*	HIGH	3.0	1607	41	1572	42	1547	43	1498	45	1448	46	1390	1302	1222
	MED	2.5	1159	58	1156	58	1145	58	1127	59	1108	60	1075	1033	957
	MED-LO	2.0	938	----	916	----	916	----	900	----	889	----	865	829	785
	LOW	1.5	785	----	766	----	743	----	730	----	709	----	683	666	604
*MH80804B*A*	HIGH	4.0	2051	----	1983	----	1895	35	1812	37	1725	39	1627	1530	1439
	MED	3.5	1736	38	1708	39	1652	40	1611	41	1540	43	1475	1394	1307
	MED-LO	3.0	1493	45	1668	40	1459	46	1429	47	1389	48	1339	1274	1204
	LOW	2.5	1200	56	1185	56	1180	56	1173	57	1158	58	1125	1125	1080
*MH80805C*A*	HIGH	5.0	2290	----	2229	----	2155	----	2047	----	1960	----	1837	1712	1584
	MED	4.0	1852	36	1820	37	1777	38	1719	39	1641	41	1567	1469	1382
	MED-LO	3.5	1615	41	1592	42	1556	43	1516	44	1470	45	1405	1346	1235
	LOW	3.0	1290	52	1285	52	1265	53	1235	54	1214	55	1174	1044	904
*MH81005C*A*	HIGH	5.0	2323	37	2225	38	2120	40	2040	42	1974	43	1801	1688	1577
	MED	4.0	1858	46	1847	46	1799	47	1744	49	1674	51	1577	1493	1399
	MED-LO	3.5	1596	53	1587	54	1571	54	1552	55	1493	57	1397	1326	1217
	LOW	3.0	1291	----	1272	----	1261	----	1257	----	1205	----	1168	1118	1060
*MH81205D*A*	HIGH	5.0	2469	42	2389	43	2300	45	2223	47	2131	49	2027	1902	1786
	MED	4.0	1575	66	1558	67	1545	67	1513	69	1500	69	1419	1354	1271
	MED-LO	3.5	1402	----	1380	----	1343	----	1319	----	1296	----	1245	1183	1106
	LOW	3.0	1200	----	1186	----	1161	----	1127	----	1082	----	1042	995	926

NOTES:

1. CFM in chart is without filters(s). Filters do not ship with this furnace, but must be provided by the installer.
2. All furnaces ship as high speed cooling. Installer must adjust blower cooling speed as needed.
3. For most jobs, about 400 CFM per ton when cooling is desirable.
4. INSTALLATION IS TO BE ADJUSTED TO OBTAIN TEMPERATURE RISE WITHIN THE RANGE SPECIFIED ON THE RATING PLATE.
5. The chart is for information only. For satisfactory operation, external static pressure must not exceed value shown on rating plate. The shaded area indicates ranges in excess of maximum external static pressure allowed when heating. The data for 0.6" w.c. to 0.8" w.c. is shown for air conditioning purposes only.
6 The dashed (---) areas indicate a temperature rise not recommended for this model.
7. At higher altitudes, a properly derated unit will have approximately the same temperature rise at a particular CFM, while the ESP at that CFM will be lower.

BLOWER PERFORMANCE SPECIFICATIONS AMH8***B*

(CFM & Temperature Rise vs. External Static Pressure)

Model	Motor Speed	Tons AC at 0.5" ESP	EXTERNAL STATIC PRESSURE (Inches Water Column)												
			0.1		0.2		0.3		0.4		0.5		0.6	0.7	0.8
			CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE	CFM	CFM	CFM
*MH80403A*B*	HIGH	3.0	1521	----	1466	----	1414	----	1373	----	1298	----	1243	1164	1075
	MED	2.5	1160	26	1160	26	1132	26	1121	26	1082	27	1042	997	925
	MED-LO	2.0	961	31	955	31	948	31	932	32	913	33	882	821	803
	LOW	1.5	781	38	785	38	781	38	773	38	761	32	745	716	668
*MH80603A*B*	HIGH	3.0	1422	31	1352	33	1307	34	1197	37	1157	38	1092	1075	983
	MED	2.5	1098	40	1081	41	1051	42	1039	43	1021	44	983	924	868
	MED-LO	2.0	919	48	913	49	892	50	847	----	829	----	818	792	728
	LOW	1.5	758	----	741	----	741	----	733	----	699	----	677	649	626
*MH80604B*B*	HIGH	4.0	2134	21	2100	21	2042	22	1975	23	1883	24	1786	1700	1601
	MED	3.5	1668	27	1663	27	1656	27	1645	27	1616	28	1549	1492	1391
	MED-LO	3.0	1419	31	1426	31	1426	31	1432	31	1419	31	1378	1328	1261
	LOW	2.5	1134	39	1145	39	1166	38	1171	38	1160	38	1144	1111	1071
*MH80803B*B*	HIGH	3.0	1607	37	1572	38	1547	39	1498	40	1448	41	1390	1302	1222
	MED	2.5	1159	51	1156	51	1145	52	1127	53	1108	53	1075	1033	957
	MED-LO	2.0	938	63	916	65	916	65	900	----	889	----	865	829	785
	LOW	1.5	785	----	766	----	743	----	730	----	709	----	683	666	604
*MH80804B*B*	HIGH	4.0	2051	----	1983	----	1895	----	1812	----	1725	----	1627	1530	1439
	MED	3.5	1736	----	1708	35	1652	36	1611	37	1540	38	1475	1394	1307
	MED-LO	3.0	1693	35	1668	36	1459	41	1429	41	1389	43	1339	1274	1204
	LOW	2.5	1200	49	1185	50	1180	50	1173	51	1158	51	1125	1125	1080
*MH80805C*B*	HIGH	5.0	2290	----	2229	----	2155	----	2047	----	1960	----	1837	1712	1584
	MED	4.0	1852	----	1820	----	1777	----	1719	---	1641	36	1567	1469	1382
	MED-LO	3.5	1615	37	1592	37	1556	38	1516	39	1470	40	1405	1346	1235
	LOW	3.0	1290	46	1285	46	1265	47	1235	48	1214	49	1174	1044	904
*MH81005C*B*	HIGH	5.0	2323	----	2225	----	2120	35	2040	36	1974	38	1801	1688	1577
	MED	4.0	1858	40	1847	40	1799	41	1744	42	1674	44	1577	1493	1399
	MED-LO	3.5	1596	46	1587	47	1571	47	1552	48	1493	50	1397	1326	1217
	LOW	3.0	1291	57	1272	58	1261	59	1257	59	1205	61	1168	1118	1060
*MH81205D*B*	HIGH	5.0	2469	----	2389	----	2300	----	2223	40	2131	42	2027	1902	1786
	MED	4.0	1575	56	1558	57	1545	58	1513	59	1500	59	1419	1354	1271
	MED-LO	3.5	1402	63	1380	64	1343	66	1319	67	1296	69	1245	1183	1106
	LOW	3.0	1200	----	1186	----	1161	----	1127	----	1082	----	1042	995	926

NOTES:

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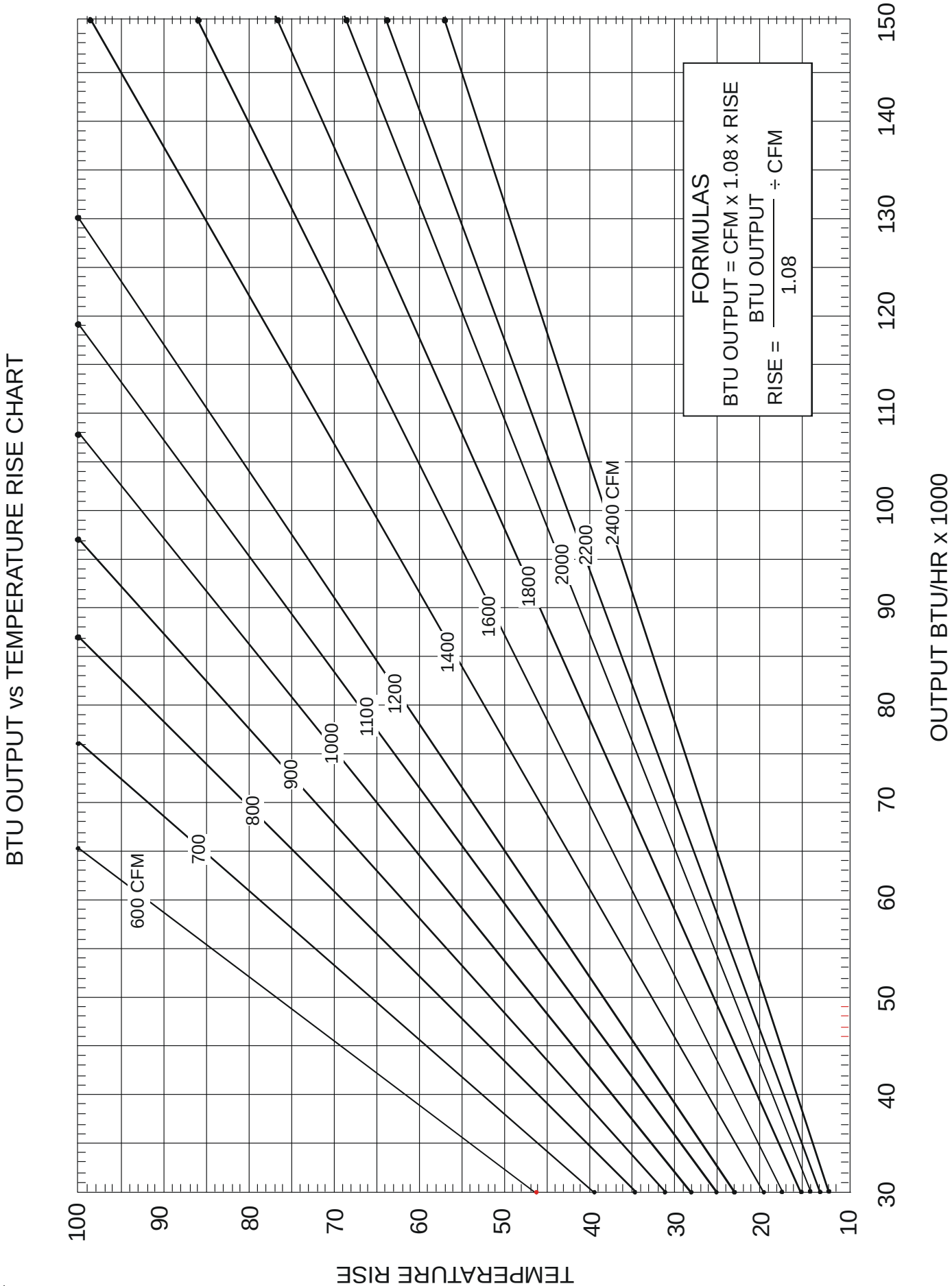
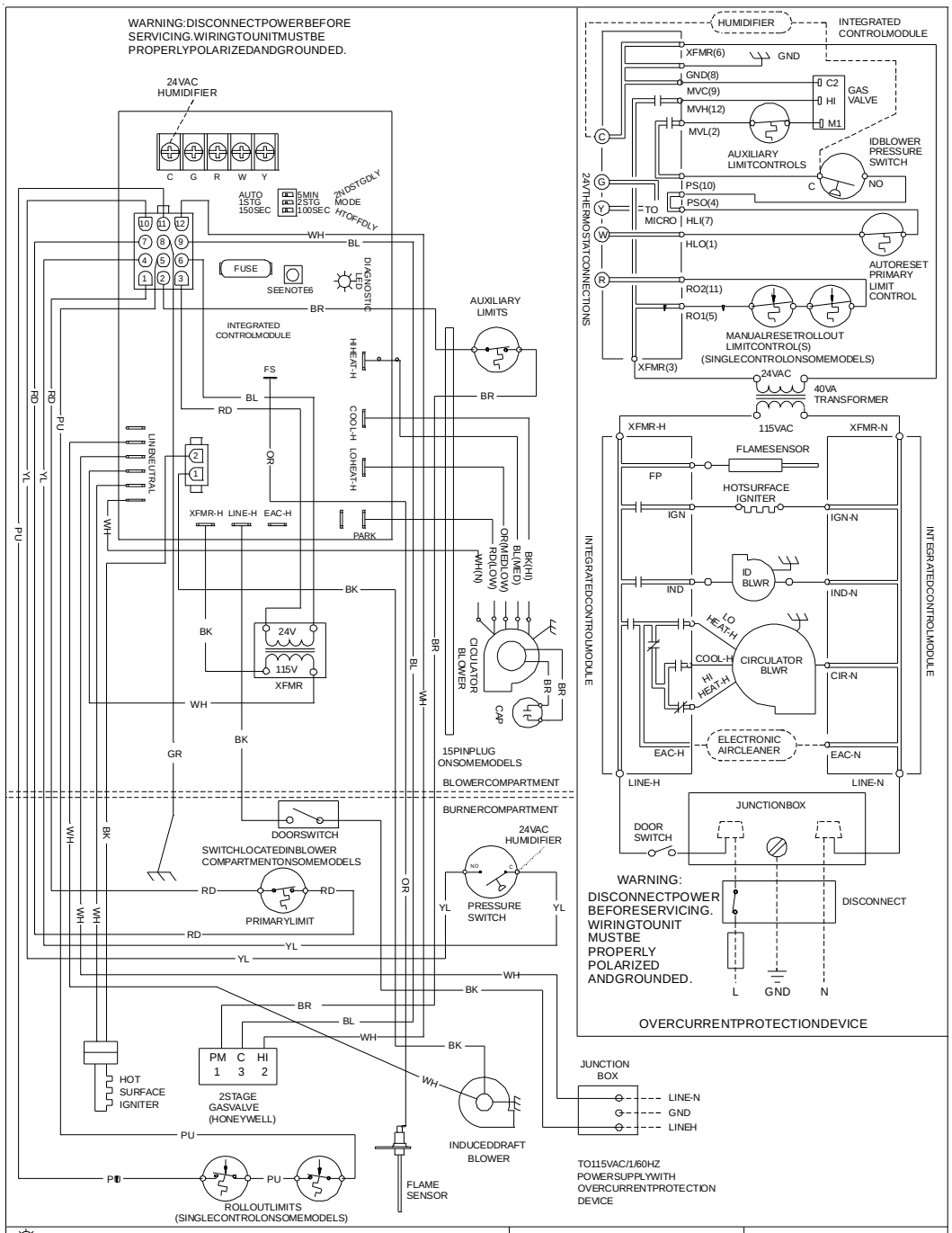
7. At higher altitudes, a properly derated unit will have approximately the same temperature rise at a particular CFM, while the ESP at that CFM will be lower.

BLOWER PERFORMANCE SPECIFICATIONS



HIGH VOLTAGE!
DISCONNECT ALL POWER BEFORE SERVICING OR INSTALLING THIS UNIT. MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

WARNING



- 0 STEADYON=NORMALOPERATION
- OFF =CONTROLFAILURE
- 1 1FLASH = SYSTEMLOCKOUT(RETRIES/RECYCLESEXCEEDED)
- 2 2FLASHES=PRESSURESWITCHSTUCKCLOSED
- 3 3FLASHES=PRESSURESWITCHSTUCKOPEN
- 4 4FLASHES=OPENHIGHLIMIT
- 5 5FLASHES=FLAMESENSEWITHOUTGASVALVE
- 6 6FLASHES= OPENROLLOUTORPENFUSE
- 7 7FLASHES=LOWFLAMESIGNAL
- 8 8FLASHES=CHECKIGNITERORIMPROPERGROUND
- C RAPIDFLASHES=REVERSED115VACPOLARITY/VERIFYGND

- LOWVOLTAGE(24V)
- LOWVOLTAGEFIELD
- HIVOLTAGE(115V)
- HIVOLTAGEFIELD
- JUNCTION
- TERMINAL
- INTERNALTO INTEGRATEDCONTROL
- PLUGCONNECTION

- EQUIPMENTGND
- FIELDGND
- FIELDSPLICE
- SWITCH(TEMP.)
- IGNITER
- SWITCH(PRESS.)
- OVERCURRENT PROT.DEVICE

COLORCODES:

YL YELLOW	PKPINK
OR ORANGE	BRBROWN
PUPURPLE	WH WHITE
GRGREEN	BLBLUE
BKBLACK	GYGRAY
	RD RED

0140F00662 REV.A

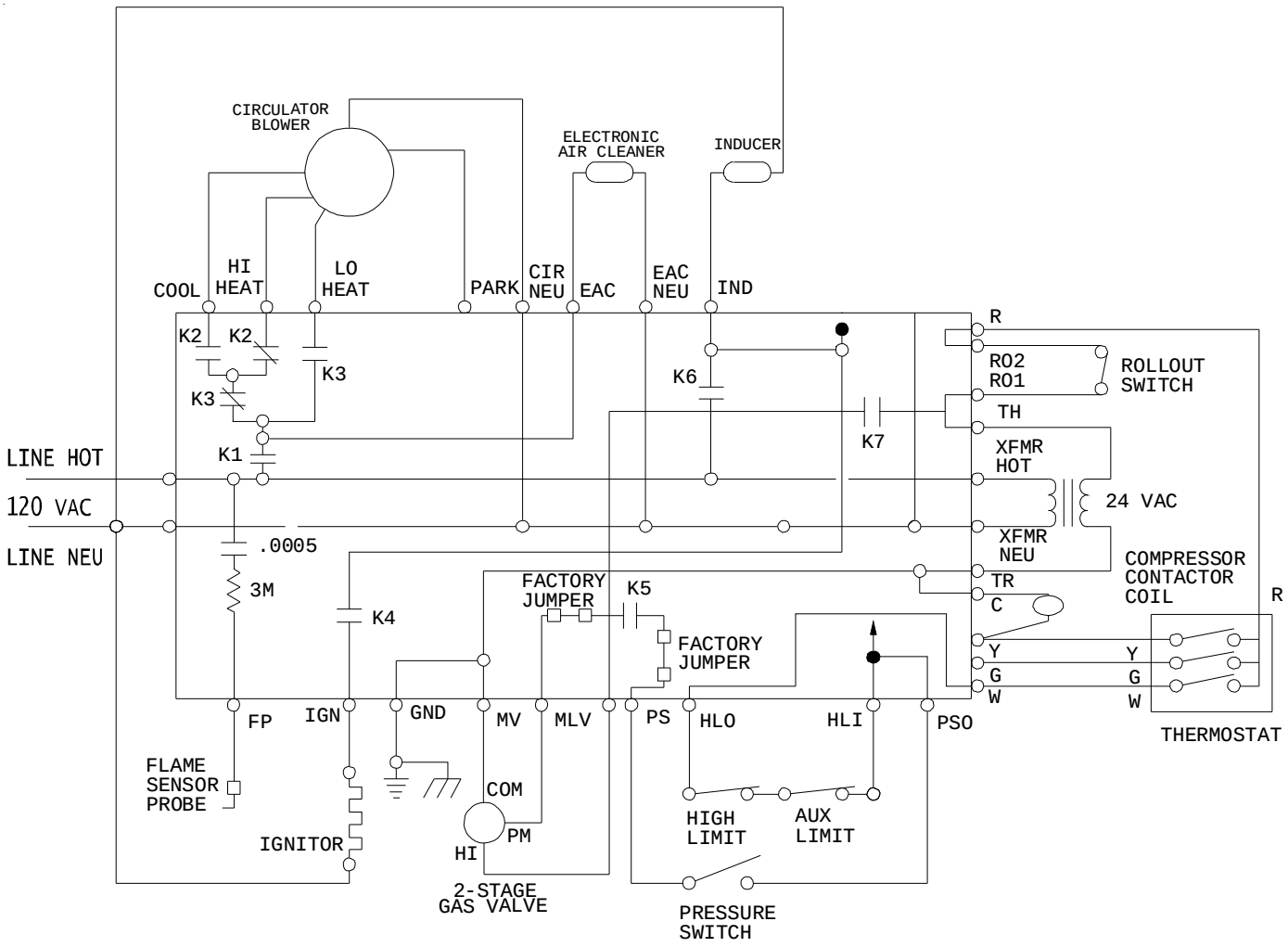
NOTES:
1. SETHEATANTICIPATORONROOMTHERMOSTATAT0.7AMPS.
2. MANUFACTURER'SSPECIFIEDREPLACEMENTPARTSMUSTBEUSEDWHENSERVICING.
3. IFANYOFTHEORIGINALWIREASSUPPLIEDWITHTHEFURNACEMUSTBE REPLACED,ITMUSTBEREPLACEDWITHWIRINGMATERIALHAVINGATEMPERATURE RATINGOFATLEAST105 °C.USECOPPERCONDUCTORSONLY.
4. BLOWERSPEEDSSHOULDBEADJUSTEDBYINSTALLERTOMATCHTHEINSTALLATION REQUIREMENTSSOASTOPROVIDETHECORRECTHEATINGTEMPERATURERISEANDTHE CORRECTCOOLINGCFM.(SEESPECSHEETFORAIRFLOWCHART)
5. UNITMUSTBEPERMANENTLYGROUNDEDANDCONFORMTON.E.C.ANDLOCALCODES.
6. TORECALLTHELAST5FAULTS,MOSTRECENTTOLEASTRECENT,DEPRESSSWITCH FORMORETHAN2SECONDSWHILEINSTANDBY(NOTHERMOSTATINPUTS).

Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.

WIRING DIAGRAM

WARNING

HIGH VOLTAGE!
DISCONNECT ALL POWER BEFORE SERVICING OR INSTALLING THIS UNIT. MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.



TYPICAL SCHEMATIC
AMH8 ____ MODEL FURNACES**
WR 50M56-289 INTEGRATED IGNITION CONTROL

This schematic is for reference only. Not all wiring is as shown above. Always refer to the appropriate wiring diagram for the unit being serviced.